


```

LL               IIIII
LL               IIIII
LL               III
LL               III
LL               III
LL               III
LL               III
LL               III
LL               III
LL               III
LL               III
LL               III
LL               III
LL               III
LLLLLLLLLLLLLL  IIIII
LLLLLLLLLLLLLL  IIIII

                SSSSSSSS
                SSSSSSSS
                SS
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                SS
                SS
                SSSSSS
                SSSSSS
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                SS
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                SS
                SSSSSSSS
                SSSSSSSS

```

```
0001 0 MODULE gslu ( IDENT = 'V04-000'
P 0002 0 %BLISS32C, ADDRESSING_MODE (EXTERNAL = LONG_RELATIVE,
0003 0 NONEXTERNAL = LONG_RELATIVE)
0004 0 ) =
0005 1 BEGIN
0006 1
0007 1 *****
0008 1 *
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0026 1 *
0027 1 *
0028 1 *****
0029 1
0030 1 ++
0031 1 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS
0032 1
0033 1 ABSTRACT:
0034 1
0035 1 Collect an unbroken sequence of letters, converting
0036 1 all letters to uppercase.
0037 1
0038 1 ENVIRONMENT: Transportable
0039 1
0040 1 AUTHOR: R.W.Friday CREATION DATE: April, 1978
0041 1
0042 1
```

GSLU
V04-000

Revision History

M 8
16-Sep-1984 00:43:09
14-Sep-1984 13:06:39

VAX-11 Bliss-32 V4.0-742
DISK\$VMSMASTER:[RUNOFF.SRC]GSLU.BLI;1 Page 2 (2)

:	44	0043	1	%SBTTL 'Revision History'
:	45	0044	1	
:	46	0045	1	MODIFIED BY:
:	47	0046	1	
:	48	0047	1	
:	49	0048	1	
:	50	0049	1	
:	51	0050	1	
:	52	0051	1	--
:	53	0052	1	

002 RER00002 Ron Randall 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

GSLU
V04-000

Module Level Declarations

N 8
16-Sep-1984 00:43:09
14-Sep-1984 13:06:39

VAX-11 BLISS-32 V4.0-742
DISK\$VMSMASTER:[RUNOFF.SRC]GSLU.BLI;1 Page 3
(3)

```
.. 55      0053 1  %SBTTL 'Module Level Declarations'
.. 56      0054 1
.. 57      0055 1
.. 58      0056 1  : TABLE OF CONTENTS:
.. 59      0057 1
.. 60      0058 1  : INCLUDE FILES:
.. 61      0059 1
.. 62      0060 1  LIBRARY 'NXPORT:XPORT';      ! XPORT Library
.. 63      0061 1  REQUIRE 'REQ:RNODEF';      ! RUNOFF variant definitions
.. 64      0192 1
.. 65      U 0193 1  %IF DSRPLUS %THEN
.. 66      U 0194 1  LIBRARY 'REQ:DPLLIB';      ! DSRPLUS BLISS Library
.. 67      0195 1  %ELSE
.. 68      0196 1  LIBRARY 'REQ:DSRLIB';      ! DSR BLISS Library
.. 69      0197 1  %FI
.. 70      0198 1
.. 71      0199 1
.. 72      0200 1  : EXTERNAL REFERENCES:
.. 73      0201 1
.. 74      0202 1  EXTERNAL
.. 75      0203 1      KHAR;
.. 76      0204 1
```

```
78 0205 1 GLOBAL ROUTINE GSLU (INPUT_STRING, OUTPUT_STRING) =
79 0206 1
80 0207 1 ++
81 0208 1 FUNCTIONAL DESCRIPTION:
82 0209 1
83 0210 1     GSLU processes an unbroken sequence of letters,
84 0211 1     stopping when 1) a non-letter is found, or
85 0212 1     2) the end of IRA is reached, or
86 0213 1     3) OUTPUT_STRING is about to overflow.
87 0214 1     All letters encountered are transferred to OUTPUT_STRING
88 0215 1     after being first converted to upper case.
89 0216 1
90 0217 1 FORMAL PARAMETERS:
91 0218 1
92 0219 1     INPUT_STRING is the string to be scanned.
93 0220 1     The collected string of letters is left in OUTPUT_STRING.
94 0221 1
95 0222 1 IMPLICIT INPUTS:      None
96 0223 1
97 0224 1 IMPLICIT OUTPUTS:    None
98 0225 1
99 0226 1 ROUTINE VALUE:
100 0227 1 COMPLETION CODES:
101 0228 1
102 0229 1     See GSLUCC.REQ for completion codes returned.
103 0230 1
104 0231 1 SIDE EFFECTS:          None
105 0232 1 --
106 0233 1
107 0234 1 BEGIN
108 0235 1 MAP
109 0236 1     OUTPUT_STRING : REF FIXED_STRING;
110 0237 1 BIND
111 0238 1     IRA = INPUT_STRING : REF FIXED_STRING;
112 0239 1
113 0240 1 WHILE 1 DO
114 0241 1     BEGIN
115 0242 1
116 0243 1         !Stop on a nonletter.
117 0244 1         IF NOT LETTER (.KHAR)
118 0245 1         THEN
119 0246 1             RETURN (IF .FS_LENGTH (OUTPUT_STRING) EQL 0
120 0247 1                 THEN GSLU_NONE ELSE GSLU_NORMAL);
121 0248 1
122 0249 1         IF .FS_LENGTH (OUTPUT_STRING) EQL .FS_MAXSIZE (OUTPUT_STRING)
123 0250 1         THEN
124 0251 1             (WHILE LETTER (.KHAR) DO (KCNS ()); RETURN GSLU_TOO_LONG); !Throw away excess letters.
125 0252 1
126 0253 1         FS_WCHAR (OUTPUT_STRING, !Convert to upper case and output the letter.
127 0254 1             (IF UPPER_LETTER (.KHAR)
128 0255 1             THEN
129 0256 1                 .KHAR ELSE UPPER_CASE (.KHAR)));
130 0257 1         KCNS (); !Get next character.
131 0258 1         END !end of processing loop.
132 0259 1
133 0260 1     END; !End of GSLU
```

Address	Op-Code	Register	Instruction	Comment	Hex
00000041	8F	68	MOVAB	12(R5), R6	0244
0000005A	8F	50	CMPL	R0, #65	0256
00000061	8F	50	BLSS	2\$	0257
0000007A	8F	50	CMPL	R0, #90	
	50	23	BLEQ	5\$	
	50	09	CMPL	R0, #97	
	50	09	BLSS	3\$	
	50	11	CMPL	R0, #122	
	50	08	BLEQ	5\$	
	0C	AC	MOVAB	OUTPUT_STRING, R0	0246
	0C	A0	TSTL	12(R0)	
	50	04	BNEQ	4\$	
	50	02	MOVAB	#2, R0	
	50	04	RET		
08	A7	01	MOVAB	#1, R0	
	0C	04	RET		
	0C	A4	CMPL	12(R4), 8(R7)	0249
	0C	4B	BNEQ	11\$	
	0C	AC	MOVAB	IRA, R0	0251
	0C	A0	MOVAB	12(R0), R3	
00000041	8F	68	MOVAB	KHAR, R1	
0000005A	8F	51	CMPL	R1, #65	
00000061	8F	51	BLSS	7\$	
0000007A	8F	51	CMPL	R1, #90	
	68	12	BLEQ	8\$	
	63	51	CMPL	R1, #97	
	68	21	BLSS	10\$	
	63	51	CMPL	R1, #122	
	68	18	BGTR	10\$	
	63	63	TSTL	(R3)	
	68	09	BGTR	9\$	
	63	8F	MOVZBL	#RINTES, KHAR	
	68	01	MNEGL	#1, (R3)	
	63	CC	BRB	6\$	
	68	B0	MOVZBL	24(R0), KHAR	
	63	A0	INCL	4(R0)	
	68	63	DECL	(R3)	
	63	C1	BRB	6\$	
	68	03	MOVAB	#3, R0	
	63	04	RET		
00000041	8F	68	MOVAB	KHAR, R0	0256
	8F	50	CMPL	R0, #65	


```
0000005A 8F      09 19 000B1  BLSS 12$
              50 D1 000B3  CMPL  R0, #90
              03 15 000BA  BLEQ  13$
              20 C2 000BC 12$:  SUBL2 #32, R0
              04 50      50 90 000BF 13$:  MOVB  R0, @4(R2)
              04 0C      04 A2 D6 000C3  INCL  4(R2)
              04 0C      04 A4 D6 000C6  INCL 12(R4)
              66 66      66 D5 000C9  TSTL  (R6)
              09 09      09 14 000CB  BGTR  14$
              68 00G     8F 9A 000CD  MOVZBL #RINTES, KHAR
              66 01      01 CE 000D1  MNEGL #1, (R6)
              68 04      09 11 000D4  BRB   15$
              04 04      B5 9A 000D6 14$:  MOVZBL @4(R5), KHAR
              04 66      A5 D6 000DA  INCL  4(R5)
              FF3B 66      D7 000DD  DECL  (R6)
              31 000DF 15$:  BRW   1$
```

0257

; Routine Size: 226 bytes, Routine Base: \$CODE\$ + 0000

```
: 134      0261 1
: 135      0262 1 END
: 136      0263 0 ELUDOM
```

!End of module

PSECT SUMMARY

Name	Bytes	Attributes
\$CODE\$	226	NOVEC,NOWRT, RD , EXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)

Library Statistics

File	----- Total	Symbols Loaded	----- Percent	Pages Mapped	Processing Time
\$255\$DUA28:[SYSLIB]XPORT.L32;1	590	0	0	252	00:00.1
\$255\$DUA28:[RUNOFF.SRC]DSRLIB.L32;1	1248	17	1	86	00:00.3

COMMAND QUALIFIERS

; BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS\$:GSLU/OBJ=OBJ\$:GSLU MSRC\$:GSLU/UPDATE=(ENH\$:GSLU)

; Size: 226 code + 0 data bytes

GSLU
V04-000

Module Level Declarations

E 9
16-Sep-1984 00:43:09

VAX-11 Bliss-32 V4.0-742

Page 7

: Run Time: 00:04.7
: Elapsed Time: 00:14.0
: Lines/CPU Min: 3386
: Lexemes/CPU-Min: 15733
: Memory Used: 70 pages
: Compilation Complete

HE
VO

0342 AH-BT13A-SE
VAX/VMS V4.0

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